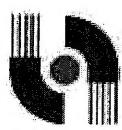


MULTIMEDIA



UNIVERSITY

STUDENT ID NO

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# MULTIMEDIA UNIVERSITY

## FINAL EXAMINATION

TRIMESTER 1, 2017/2018

**BFN2084 – PERSONAL FINANCE**

( All sections / Groups )

28 OCTOBER 2017

9.00 am – 11.00 am

(2 Hours)

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### INSTRUCTIONS TO STUDENTS

1. This question paper consists of **SEVEN (7)** pages excluding cover page.
2. **SECTION A: 20 Multiples Choice Questions.** Please shade your answer in the OMR sheet provided.
3. **SECTION B: 4 Structured Questions.** Answer **ALL FOUR** questions in the answer booklet provided.
4. Marks allocations are shown at the end of each question.

**SECTION A: MULTIPLE CHOICES QUESTIONS (40%)**

- 1) The individual designated by the owner of the life insurance policy to receive the policy's proceeds upon the death of the insured is called the
  - A) policy holder.
  - B) beneficiary.
  - C) insured.
  - D) actuary.
  - E) heirs
  
- 2) Billy has chosen to purchase a new vehicle. The vehicle costs RM15,000. His APR is 10% and he will be financing the vehicle for 36 months. How much will Billy pay each month for his new vehicle?
  - A) RM484.01
  - B) RM296.35
  - C) RM312.66
  - D) RM405.29
  - E) RM496.33
  
- 3) Sharing the financial consequences associated with risk in the insurance industry is sometimes called
  - A) risk pooling.
  - B) risk deferring.
  - C) risk migration.
  - D) risk splitting.
  - E) none of the above
  
- 4) For which of these situations is life insurance a good idea?
  - A) married with children
  - B) married, single-income couple with no children
  - C) single with no dependents
  - D) Only A and B
  - E) All of the above.
  
- 5) John purchases a life insurance policy on his wife Betty where he pays the premium and he will receive the life insurance money when she dies. John is both the \_\_\_\_\_ and the \_\_\_\_\_ who will receive the \_\_\_\_\_ upon the death of Betty, the \_\_\_\_\_.
  - A) insured; beneficiary; money; policyholder
  - B) policy owner; beneficiary; face amount; insured
  - C) policy owner; insured; face amount; beneficiary
  - D) beneficiary; premium payer; face amount; policy holder
  - E) none of the above

**Continued...**

6) Which of the following is not a consideration in determining the amount of homeowner's insurance a person needs?

- A) Cover the entire replacement cost in the event of a complete loss.
- B) Match the insurance coverage of similar homes in your neighborhood.
- C) Protect against the effect of inflation eroding away your coverage.
- D) Purchase flood or earthquake coverage if you are in an area prone to these occurrences.
- E) Determine if detached structures are adequately covered under standard policies.

7) Antoine LaDuke suffered a major loss on his older home due to mud from a flood. Although he had homeowner's insurance, what was the probable reason he was not covered?

- A) His home was probably too expensive.
- B) His policy excluded flood-related damages.
- C) This is a personal liability issue.
- D) Older homes are excluded from flood-related damages.
- E) None of the above

8) An investor owns stock from seven different companies, two rental houses, and three government bonds. Together these assets are considered to be the investor's \_\_\_\_\_.  
A) collection  
B) derivative holding  
C) asset class  
D) portfolio  
E) none of the above

9) Suppose that you purchased a machine several years ago for your company. You recently sold the machine for more than you paid. This is an example of a \_\_\_\_\_.  
A) capital carry-forward  
B) non-taxable gain  
C) capital gain  
D) windfall  
E) none of the above

10) The \_\_\_\_\_ is the stated amount on the face of a bond, which the firm is to repay at the maturity date.  
A) historical value  
B) debt price  
C) par value  
D) relevant value  
E) none of the above

**Continued...**

11) When you purchase an asset that generates a return, it is generally considered to be \_\_\_\_\_.

- A) an investment
- B) speculation
- C) a windfall
- D) an expected returner
- E) none of the above

12) You have just purchased shares of stock from a stockbroker. These shares were previously traded on the Bursa Malaysia. This trade took place in the \_\_\_\_\_.  
A) primary market  
B) secondary market  
C) tertiary market  
D) quaternary market  
E) none of the above

13) A(n) \_\_\_\_\_ is a legal document that describes a securities issue and is made available to potential investors.  
A) disclosure statement  
B) offering contract  
C) prospectus  
D) tombstone  
E) none of the above

14) Which of the following is a disadvantage to mutual fund investing?  
A) On average they underperform the market returns.  
B) Costs may be high and vary dramatically from fund to fund.  
C) Not all mutual funds are truly safe.  
D) You cannot diversify away systematic risk.  
E) All of the above.

15) Which of the following is a benefit to investing in a mutual fund?  
A) Most small investors don't have the time, knowledge or desire to do the research necessary to purchase individual stocks.  
B) Mutual fund transaction fees are considerably lower than the brokerage fees most small investors incur buying and selling individual stocks.  
C) Most small investors want to be able to invest relatively small amounts of money on a regular basis.  
D) All of the above are correct.  
E) Only A and B are correct.

**Continued...**

16) As a child gets older, the main investment objective becomes \_\_\_\_\_ and consequently the percentage invested in common stocks should \_\_\_\_\_.  
A) Growth in capital; increase  
B) Preservation of capital; increase  
C) Growth in capital; decrease  
D) Preservation of capital; decrease  
E) None of the above

17) You are participating in a pension plan where the company's contributions vary from year to year, depending on the firm's performance. This is an example of a(n) \_\_\_\_\_.  
A) variable contribution plan  
B) earnings establishment plan  
C) performance retirement plan  
D) profit-sharing plan  
E) none of the above

18) When should you begin planning for a financially secure retirement?  
A) as soon as you begin your working career  
B) in your early 40s  
C) in your early 50s  
D) in your early 60s  
E) none of the above

19) Which of the following factors is the MOST important when determining your retirement savings needs?  
A) your desired retirement income  
B) the expected rate of inflation  
C) the rate of return you can earn on your savings  
D) expected Social Security benefits  
E) none of the above

20) You are engaging in \_\_\_\_\_ when you plan for what happens to your accumulated wealth and your dependents after you die, as well as determining decision-making authority should you be physically or mentally impaired.  
A) estate planning  
B) retirement planning  
C) unified planning  
D) death establishment  
E) None of the above is correct.

**Continued...**

**Section B: Structured Questions (60%).**

**Answer ALL the questions.**

**Question 1 (15 marks)**

(a) How much did you borrow if your annual payments are RM5,000 for the next seven years and the interest rate is 9%?

**(8 marks)**

(b) List the six keys to successful debt management.

**(7 marks)**

**Question 2 (15 marks)**

(a) Describe the two basic approaches used to determine the amount of life insurance needed?

**(7 marks)**

(b) Define coinsurance and deductible in a life insurance policy.

**(8 marks)**

**Question 3 (15 marks)**

(a) What is the purpose for adjusting your asset allocation as you age? Discuss why wouldn't "the best" or highest returning portfolio always be prudent.

**(6 marks)**

(b) Investors need to be aware of nine sources of risk when calculating the risk-return trade-off. List and briefly describe these nine sources of risk.

**(9 marks)**

**Question 4 (15 marks)**

(a) Explain why timing is essential to retirement planning.

**(5 marks)**

(b) Define estate planning. List the objectives to accomplish through estate planning.

**(10 marks)**

**The End of Page**

## Present Value and Future Value Tables

Table A-1 Future Value Interest Factors for One Dollar Compounded at  $k$  Percent for  $n$  Periods:  $FVIF_{k,n} = (1 + k)^n$ 

Period	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%	13%	14%	15%	16%	20%	24%	25%	30%
1	1.0100	1.0200	1.0300	1.0400	1.0500	1.0600	1.0700	1.0800	1.0900	1.1000	1.1100	1.1200	1.1300	1.1400	1.1500	1.1600	1.2000	1.2400	1.2500	1.3000
2	1.0201	1.0404	1.0609	1.0816	1.1025	1.1236	1.1449	1.1664	1.1881	1.2100	1.2321	1.2544	1.2769	1.2996	1.3225	1.3456	1.4400	1.5376	1.5625	1.6900
3	1.0303	1.0612	1.0927	1.1249	1.1576	1.1910	1.2250	1.2597	1.2950	1.3310	1.3676	1.4049	1.4429	1.4815	1.5209	1.5609	1.7280	1.9066	1.9531	2.1970
4	1.0406	1.0824	1.1255	1.1699	1.2155	1.2625	1.3108	1.3605	1.4116	1.4641	1.5181	1.5735	1.6305	1.6890	1.7490	1.8106	2.0736	2.3642	2.4414	2.8561
5	1.0510	1.1041	1.1593	1.2167	1.2763	1.3382	1.4026	1.4693	1.5386	1.6105	1.6851	1.7623	1.8424	1.9254	2.0114	2.1003	2.4883	2.9316	3.0518	3.7129
6	1.0615	1.1262	1.1941	1.2653	1.3401	1.4185	1.5007	1.5869	1.6771	1.7716	1.8704	1.9738	2.0820	2.1950	2.3131	2.4364	2.5860	3.6352	3.8147	4.8268
7	1.0721	1.1487	1.2299	1.3159	1.4071	1.5036	1.6058	1.7138	1.8280	1.9487	2.0762	2.2107	2.3526	2.5023	2.6600	2.8262	3.5832	4.5077	4.7684	6.2749
8	1.0829	1.1717	1.2668	1.3666	1.4775	1.5938	1.7182	1.8509	1.9926	2.1436	2.3045	2.4760	2.6584	2.8562	3.0590	3.2784	4.2998	5.5895	5.9605	8.1573
9	1.0937	1.1951	1.3048	1.4233	1.5513	1.6895	1.8385	1.9990	2.1719	2.3579	2.5580	2.7731	3.0040	3.2519	3.5179	3.8030	5.1598	6.9310	7.4506	10.604
10	1.1046	1.2190	1.3439	1.4802	1.6289	1.7908	1.9672	2.1589	2.3674	2.5937	2.8394	3.1058	3.3946	3.7072	4.0456	4.4114	6.1917	8.5944	9.3132	13.786
11	1.1157	1.2434	1.3842	1.5395	1.7103	1.8983	2.1049	2.3316	2.5804	2.8531	3.1518	3.4785	3.8359	4.2262	4.6524	5.1173	7.4301	10.657	11.642	17.922
12	1.1268	1.2682	1.4258	1.6010	1.7959	2.0122	2.5252	2.5182	2.8127	3.1384	3.4985	3.8960	4.3345	4.8179	5.3503	5.9360	8.9161	13.215	14.552	23.298
13	1.1381	1.2936	1.4685	1.6651	1.8856	2.1329	2.4098	2.7191	3.0658	3.4523	3.8833	4.3635	4.8980	5.4924	6.1528	6.8858	10.699	16.386	18.190	30.288
14	1.1495	1.3195	1.5126	1.7317	1.9795	2.2609	2.5785	2.9372	3.3417	3.7975	4.3104	4.8871	5.5348	6.2613	7.0757	7.9875	12.839	20.319	22.737	39.374
15	1.1610	1.3459	1.5580	1.8009	2.0789	2.3966	2.7590	3.1722	3.6425	4.1772	4.7846	5.4736	6.2543	7.1379	8.1371	9.2655	15.407	25.196	28.422	51.186
16	1.1726	1.3728	1.6047	1.8730	2.1829	2.5404	2.9522	3.4259	3.9703	4.5950	5.3109	6.1304	7.0673	8.1372	9.3576	10.748	18.488	31.243	35.527	66.542
17	1.1843	1.4002	1.6528	1.9479	2.2920	2.6928	3.1588	3.7000	4.3276	5.0546	5.8951	6.8660	7.9861	9.2765	10.761	12.468	22.186	38.741	44.409	85.504
18	1.1961	1.4282	1.7024	2.0258	2.4066	2.8543	3.3799	3.9860	4.7171	5.5599	6.5436	7.6900	9.0243	10.575	12.375	14.463	26.623	48.039	55.511	112.455
19	1.2081	1.4568	1.7565	2.1068	2.5270	3.0256	3.6165	4.3157	5.1417	6.1159	7.2633	8.6128	10.197	12.056	14.232	16.777	31.948	59.568	69.389	146.192
20	1.2202	1.4859	1.8061	2.1911	2.6533	3.2071	3.8697	4.6610	5.6044	6.7275	8.0623	9.6463	11.523	13.743	16.367	19.461	38.338	73.864	86.736	190.050
21	1.2324	1.5157	1.8603	2.2788	2.7860	3.3986	4.1406	5.0338	6.1088	7.4002	8.9492	10.804	13.021	15.666	18.822	22.574	46.005	91.592	108.420	247.065
22	1.2447	1.5460	1.9161	2.3699	2.9253	3.6035	4.4304	5.4365	6.6586	8.1403	9.9336	12.100	14.714	17.861	21.645	26.186	55.206	113.574	135.525	321.184
23	1.2572	1.5769	1.9736	2.4647	3.0715	3.8197	4.7405	5.8715	7.2579	8.6543	11.026	13.552	16.627	20.362	24.891	30.376	66.247	140.831	169.407	417.539
24	1.2697	1.6084	2.0328	2.5633	3.2281	4.0489	5.0724	6.3412	7.9111	9.8497	12.239	15.179	18.788	23.212	28.625	35.236	79.497	174.631	211.758	542.801
25	1.2824	1.6406	2.0938	2.6658	3.3864	4.2919	5.4274	6.8485	8.6231	10.535	13.585	17.000	21.231	26.462	32.919	40.874	95.396	216.542	264.698	705.641
30	1.3478	1.8114	2.4273	3.2434	4.3219	5.7435	7.1613	10.063	13.268	17.449	22.892	29.980	39.116	50.950	66.212	85.850	237.376	634.820	807.794	*
35	1.4166	1.9989	2.8139	3.9461	5.5160	7.6861	10.677	14.785	20.414	28.102	38.575	52.800	72.069	98.100	133.176	180.314	590.668	*	*	*
36	1.4308	2.0399	2.8983	4.1039	5.7918	8.1473	11.424	15.968	22.251	30.913	42.818	59.136	81.437	111.834	153.152	209.164	708.802	*	*	*
40	1.4889	2.2080	3.2620	4.8010	7.0400	10.286	14.974	21.725	31.409	45.259	65.001	93.051	132.782	188.884	267.864	378.721	*	*	*	*
50	1.6446	2.6916	4.3839	7.1067	11.467	18.420	29.457	46.502	74.358	117.391	184.565	289.002	450.736	700.233	*	*	*	*	*	*

Table A-2 Future Value Interest Factors for a One-Dollar Annuity Compounded at  $k$  Percent for  $n$  Periods:  $FVIFA_{k,n} = [(1 + k)^n - 1] / k$ 

Period	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%	13%	14%	15%	16%	20%	24%	25%	30%	
1	1.0000	1.0200	1.0300	1.0400	1.0500	1.0600	1.0700	1.0800	1.0900	1.1000	1.1100	1.1200	1.1300	1.1400	1.1500	1.1600	1.2000	1.2400	1.2500	1.3000	
2	2.0100	2.0200	2.0300	2.0400	2.0500	2.0600	2.0700	2.0800	2.0900	2.1000	2.1100	2.1200	2.1300	2.1400	2.1500	2.1600	2.2000	2.2400	2.2500	2.3000	
3	3.0301	3.0604	3.0909	3.1216	3.1525	3.1836	3.2149	3.2464	3.2781	3.3100	3.3421	3.3744	3.4069	3.4396	3.4725	3.5056	3.6400	3.7776	3.8125	3.9900	
4	4.0604	4.1216	4.1836	4.2465	4.3101	4.3746	4.4399	4.5061	4.5731	4.6410	4.7097	4.7793	4.8498	4.9211	4.9934	5.0665	5.3680	5.6842	5.7656	6.1870	
5	5.1010	5.2040	5.3091	5.4163	5.5256	5.6371	5.7507	5.8666	5.9847	6.1051	6.2278	6.3528	6.4803	6.6101	6.7424	6.8771	7.4416	8.0484	8.2070	9.0431	
6	6.1520	6.3081	6.4684	6.6330	6.8019	6.9753	7.1533	7.3359	7.5233	7.7156	7.9129	8.1152	8.3227	8.5355	8.7537	8.9775	9.9299	10.980	11.259	12.756	
7	7.2135	7.4343	7.6525	7.8983	8.1420	8.3938	8.6540	8.9228	9.2004	9.4872	9.7833	10.089	10.405	10.730	11.067	11.414	12.916	14.615	15.073	17.583	
8	8.2857	8.5830	8.8923	9.2142	9.5491	9.8975	10.260	10.637	11.028	11.436	11.859	12.300	12.757	13.233	13.727	14.240	16.499	19.123	19.842	23.858	
9	9.3685	9.7546	10.1589	10.583	11.027	11.491	11.978	12.488	13.021	13.579	14.164	14.776	15.416	16.085	16.786	17.519	20.799	24.712	25.802	32.015	
10	10.462	11.293	12.169	12.808	13.486	14.207	14.972	15.784	16.645	17.560	18.531	19.561	20.655	21.814	23.045	24.349	25.733	32.150	40.238	42.566	56.405
11	11.567	12.169	12.808	13.486	14.207	14.972	15.784	16.645	17.560	18.531	19.561	20.655	21.814	23.045	24.349	25.733	32.150	40.238	42.566	56.405	
12	12.683	13.412	14.192	15.026	15.917	16.870	17.888	18.977	20.141	21.384	22.713	24.133	25.650	27.271	29.002	30.850	39.581	50.895	54.208	74.327	
13	13.809	14.680	15.618	16.527	17.713	18.882	20.141	21.495	22.953	24.523	26.212	28.029	29.985	32.083	34.352	36.786	48.497	64.110	68.760	97.62	

## Present Value and Future Value Tables

Table A-3 Present Value Interest Factors for One Dollar Discounted at  $k$  Percent for  $n$  Periods:  $PVIF_{k,n} = 1 / (1 + k)^n$ 

Period	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%	21%	22%	23%	24%	25%	30%	
1	0.9901	0.9804	0.9709	0.9615	0.9524	0.9434	0.9346	0.9259	0.9174	0.9091	0.9009	0.8929	0.8850	0.8772	0.8699	0.8621	0.8533	0.8465	0.8400	0.8333	0.8265	0.8200	0.7692	0.5917			
2	0.9803	0.9612	0.9426	0.9246	0.9070	0.8900	0.8734	0.8573	0.8417	0.8264	0.8116	0.7972	0.7831	0.7695	0.7561	0.7432	0.6944	0.6504	0.6400	0.6211	0.6040	0.5877	0.5787	0.5245	0.5120	0.4552	
3	0.9706	0.9423	0.9151	0.8890	0.8638	0.8396	0.8163	0.7938	0.7722	0.7513	0.7312	0.7118	0.6931	0.6750	0.6575	0.6407	0.5787	0.5245	0.5120	0.4996	0.4552	0.4552	0.4552	0.4552	0.4552	0.4552	
4	0.9610	0.9238	0.8885	0.8548	0.8227	0.7921	0.7629	0.7350	0.7084	0.6830	0.6587	0.6355	0.6133	0.5921	0.5718	0.5523	0.4823	0.4230	0.4098	0.3501	0.3277	0.2693	0.2693	0.2693	0.2693	0.2693	
5	0.9515	0.9057	0.8626	0.8219	0.7835	0.7473	0.7130	0.6806	0.6499	0.6209	0.5935	0.5674	0.5428	0.5194	0.4972	0.4761	0.4019	0.3411	0.3277	0.2693	0.2693	0.2693	0.2693	0.2693	0.2693		
6	0.9420	0.8880	0.8375	0.7903	0.7462	0.7050	0.6663	0.6302	0.5963	0.5645	0.5346	0.5066	0.4803	0.4556	0.4323	0.4104	0.3349	0.2751	0.2621	0.2072	0.1594	0.12218	0.2097	0.1594	0.12218	0.2097	0.1594
7	0.9327	0.8706	0.8131	0.7599	0.7107	0.6651	0.6227	0.5835	0.5470	0.5132	0.4817	0.4523	0.4251	0.3996	0.3759	0.3538	0.2791	0.2218	0.2097	0.1594	0.12218	0.2097	0.1594	0.12218	0.2097	0.1594	
8	0.9235	0.8535	0.7894	0.7307	0.6768	0.6274	0.5820	0.5403	0.5019	0.4665	0.4339	0.4039	0.3762	0.3508	0.3269	0.3050	0.2326	0.1788	0.1678	0.1226	0.0943	0.0943	0.0943	0.0943	0.0943	0.0943	
9	0.9143	0.8368	0.7664	0.7026	0.6446	0.5919	0.5439	0.5002	0.4604	0.4241	0.3909	0.3606	0.3329	0.3075	0.2843	0.2630	0.1938	0.1443	0.1342	0.1074	0.0725	0.0725	0.0725	0.0725	0.0725	0.0725	
10	0.9053	0.8203	0.7441	0.6756	0.6139	0.5584	0.5083	0.4632	0.4224	0.3855	0.3522	0.3220	0.2946	0.2697	0.2472	0.2267	0.1615	0.1164	0.1074	0.0725	0.0725	0.0725	0.0725	0.0725	0.0725		
11	0.8963	0.8043	0.7224	0.6496	0.5847	0.5268	0.4751	0.4289	0.3875	0.3505	0.3173	0.2875	0.2607	0.2366	0.2149	0.1954	0.1346	0.0938	0.0859	0.0558	0.0558	0.0558	0.0558	0.0558	0.0558		
12	0.8874	0.7885	0.7014	0.6246	0.5568	0.4970	0.4440	0.3971	0.3555	0.3186	0.2858	0.2567	0.2307	0.2076	0.1869	0.1685	0.1122	0.0757	0.0687	0.0429	0.0429	0.0429	0.0429	0.0429	0.0429		
13	0.8787	0.7730	0.6810	0.6006	0.5303	0.4688	0.4150	0.3677	0.3262	0.2897	0.2575	0.2292	0.2042	0.1821	0.1625	0.1452	0.0935	0.0610	0.0550	0.0330	0.0330	0.0330	0.0330	0.0330	0.0330		
14	0.8700	0.7579	0.6611	0.5775	0.5051	0.4423	0.3878	0.3405	0.2992	0.2633	0.2320	0.2046	0.1807	0.1597	0.1413	0.1252	0.0779	0.0492	0.0440	0.0254	0.0254	0.0254	0.0254	0.0254	0.0254		
15	0.8613	0.7430	0.6419	0.5553	0.4810	0.4173	0.3624	0.3152	0.2745	0.2394	0.2090	0.1827	0.1599	0.1401	0.1229	0.1079	0.0649	0.0397	0.0352	0.0195	0.0195	0.0195	0.0195	0.0195	0.0195		
16	0.8528	0.7284	0.6232	0.5339	0.4581	0.3936	0.3387	0.2919	0.2519	0.2176	0.1883	0.1631	0.1415	0.1229	0.1069	0.0930	0.0541	0.0320	0.0281	0.0150	0.0150	0.0150	0.0150	0.0150	0.0150		
17	0.8444	0.7142	0.6050	0.5134	0.4363	0.3714	0.3166	0.2703	0.2311	0.1978	0.1696	0.1456	0.1252	0.1078	0.0929	0.0802	0.0451	0.0258	0.0225	0.0116	0.0116	0.0116	0.0116	0.0116	0.0116		
18	0.8360	0.7002	0.5874	0.4936	0.4155	0.3503	0.2959	0.2502	0.2120	0.1799	0.1524	0.1300	0.1108	0.0946	0.0808	0.0691	0.0376	0.0208	0.0180	0.0089	0.0089	0.0089	0.0089	0.0089	0.0089		
19	0.8277	0.6864	0.5703	0.4746	0.3957	0.3305	0.2765	0.2317	0.1945	0.1635	0.1377	0.1161	0.0981	0.0829	0.0703	0.0596	0.0313	0.0168	0.0144	0.0068	0.0068	0.0068	0.0068	0.0068	0.0068		
20	0.8195	0.6730	0.5537	0.4564	0.3769	0.3118	0.2584	0.2145	0.1784	0.1486	0.1240	0.1037	0.0868	0.0728	0.0611	0.0514	0.0261	0.0135	0.0115	0.0053	0.0053	0.0053	0.0053	0.0053	0.0053		
21	0.8114	0.6598	0.5375	0.4388	0.3589	0.2942	0.2415	0.1987	0.1637	0.1351	0.1117	0.0926	0.0768	0.0638	0.0531	0.0443	0.0217	0.0109	0.0092	0.0040	0.0040	0.0040	0.0040	0.0040	0.0040		
22	0.8034	0.6468	0.5219	0.4220	0.3418	0.2775	0.2257	0.1839	0.1502	0.1228	0.1007	0.0826	0.0680	0.0560	0.0462	0.0382	0.0181	0.0088	0.0074	0.0031	0.0031	0.0031	0.0031	0.0031	0.0031		
23	0.7954	0.6342	0.5067	0.4057	0.3256	0.2618	0.2109	0.1703	0.1378	0.1117	0.0907	0.0738	0.0601	0.0491	0.0402	0.0329	0.0151	0.0071	0.0059	0.0024	0.0024	0.0024	0.0024	0.0024	0.0024		
24	0.7876	0.6217	0.4919	0.3901	0.3101	0.2470	0.1971	0.1577	0.1264	0.1015	0.0817	0.0659	0.0532	0.0431	0.0349	0.0284	0.0126	0.0057	0.0047	0.0018	0.0018	0.0018	0.0018	0.0018	0.0018		
25	0.7798	0.6095	0.4776	0.3751	0.2953	0.2330	0.1842	0.1460	0.1160	0.0923	0.0736	0.0588	0.0471	0.0378	0.0304	0.0245	0.0105	0.0046	0.0038	0.0014	0.0006	0.0006	0.0006	0.0006	0.0006		
30	0.7419	0.5521	0.4120	0.3083	0.2314	0.1741	0.1314	0.0994	0.0754	0.0573	0.0437	0.0334	0.0256	0.0196	0.0151	0.0116	0.0042	0.0016	0.0012	*	*	*	*	*	*		
35	0.7059	0.5000	0.3554	0.2534	0.1813	0.1301	0.0937	0.0676	0.0490	0.0356	0.0259	0.0189	0.0139	0.0102	0.0075	0.0055	0.0017	0.0005	*	*	*	*	*	*	*	*	
36	0.6989	0.4902	0.3450	0.2437	0.1727	0.1227	0.0875	0.0626	0.0449	0.0323	0.0234	0.0169	0.0123	0.0089	0.0065	0.0048	0.0014	*	*	*	*	*	*	*	*	*	
40	0.6717	0.4529	0.3066	0.2083	0.1420	0.0972	0.0668	0.0460	0.0318	0.0221	0.0154	0.0107	0.0075	0.0053	0.0037	0.0026	0.0007	*	*	*	*	*	*	*	*	*	
50	0.6080	0.3715	0.2281	0.1407	0.0872	0.0543	0.0339	0.0213	0.0134	0.0085	0.0054	0.0035	0.0022	0.0014	0.0009	0.0006	*	*	*	*	*	*	*	*	*		

Table A-4 Present Value Interest Factors for a One-Dollar Annuity Discounted at  $k$  Percent for  $n$  Periods:  $PVIFA = [1 - 1/(1 + k)^n] / k$ 

Period	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%	21%	22%	23%	24%	25%	30%
1	0.9901	0.9804	0.9709	0.9615	0.9524	0.9434	0.9346	0.9259	0.9174	0.9091	0.9009	0.8929	0.8850	0.8772	0.8698	0.8621	0.8533	0.8465	0.8400	0.8333	0.8265	0.8200	0.7692	0.5917		
2	1.9704	1.9146	1.9135	1.8861	1.8594	1.8334	1.8080	1.7833	1.7589	1.7355	1.7125	1.6901	1.6681	1.6467	1.6257	1.6052	1.5278	1.4568	1.4400	1.3609	1.3161	1.2218	1.1661	1.12218	0.9161	
3	2.9410	2.8839	2.8286	2.7751	2.7232	2.6730	2.6243	2.5771	2.5313	2.4869	2.4437	2.4018	2.3612	2.3216	2.2832	2.2459	2.1065	1.9613	1.9520	1.8161	1.7611	1.7161	1.6761	1.62218	1.3161	
4	3.9120	3.8077	3.7171	3.6299	3.5460	3.4651	3.3872	3.3121	3.2397	3.1699	3.1024	3.0373	2.9745	2.9137	2.8550	2.7982	2.5887	2.4043	2.3161	2.2616	2.2128	2.1646	2.1161	2.0621	1.8161	
5	4.8534	4.7135	4.5797	4.4518	4.3295	4.2124	4.1022	3.9927	3.8798	3.7608	3.6511	3.5527														